

## **IN THE CLAIMS**

Please cancel claims 9-12, 21-24, 26-27 and 35-40.

Please amend the claims as follows.

1. (Original) An apparatus comprising:
  - (A) at least one processor;
  - (B) a memory coupled to the at least one processor;
  - (C) a shared resource coupled to the at least one processor, wherein sharing of the shared resource is controlled by a shared resource server; and
  - (D) a resource sharing mechanism residing in the memory and executed by the at least one processor, the resource sharing mechanism including:
    - a first mechanism that establishes a layer two tunneling protocol (L2TP) tunnel between the shared resource server and a client;
    - a second mechanism that establishes an outgoing connection from the client through the shared resource via the L2TP tunnel using a plurality of messages defined by a predefined L2TP protocol for the L2TP tunnel; and
    - a third mechanism that establishes an incoming connection through the shared resource to the client via the L2TP tunnel using a plurality of messages defined by user-defined extensions to the L2TP protocol for the L2TP tunnel.
2. (Original) The apparatus of claim 1 wherein the client resides in a second logical partition on the apparatus that is separate from a first logical partition that includes the shared resource.
3. (Original) The apparatus of claim 1 wherein the client comprises a computer system coupled to the apparatus via a network connection.
4. (Original) The apparatus of claim 1 wherein the shared resource comprises a modem.

5. (Original) The apparatus of claim 1 wherein the shared resource comprises a virtual private network (VPN).

6. (Original) The apparatus of claim 1 wherein the incoming and outgoing connections are point-to-point connections.

7. (Original) The apparatus of claim 1 wherein the plurality of messages defined by the user-defined extensions to the L2TP protocol comprise an accept incoming call request message and an accept incoming call reply message.

8. (Currently Amended) An apparatus comprising:

(A) at least one processor;

(B) a memory coupled to the at least one processor;

(C) first and second logical partitions defined on the apparatus, the first logical partition including a shared-resource modem server that controls a shared-resource modem;

(D) a resource sharing mechanism residing in the first logical partition, the resource sharing mechanism sharing the modem between the modem server in the first logical partition and a client in the second logical partition by including:-

a first mechanism that establishes a layer two tunneling protocol (L2TP)-tunnel between the shared-resource server and a client that resides in the second logical partition;-

a second mechanism that establishes an outgoing connection from the client through the shared resource via the L2TP tunnel using a plurality of messages defined by a predefined L2TP protocol for the L2TP tunnel; and

a third mechanism that establishes an incoming connection through the shared resource to the client in the second logical partition via the L2TP tunnel using a plurality of messages defined by user-defined extensions to the L2TP protocol for the L2TP tunnel; establishing a layer two tunneling protocol (L2TP) tunnel between the modem server and the client by running an L2TP profile on the client and by performing handshaking to establish the L2TP tunnel;

(E) the client sending an accept incoming call request (AICRO) message that is a user-defined extension to an L2TP protocol for the L2TP tunnel;

(F) if the modem is available, the modem server responding to the AICRO message with an accept incoming call reply (AICRP) message that is a user-defined extension to the L2TP protocol for the L2TP tunnel;

(G) the modem server putting the modem in answer mode;

(H) the modem answering a call and establishing a connection;

(I) the modem server sending an incoming call request (ICRQ) message that is defined in the L2TP protocol to the client to indicate a call has been received;

(J) the client sending an incoming call reply (ICRP) message that is defined in the L2TP protocol to the modem server to acknowledge the incoming call;

(K) the modem server sending an incoming call connect (ICCN) message to the client to connect the call; and

(L) starting virtual point-to-point end-to-end communication between the client and the modem.

9-12. (Cancelled)

13. (Original) A computer-implemented method for sharing a shared resource between a resource server that controls the shared resource and a client, the method comprising the steps of:

(A) establishing a layer two tunneling protocol (L2TP) tunnel between the resource server and the client;

(B) establishing an outgoing connection from the client through the shared resource via the L2TP tunnel using a plurality of messages defined by a predefined L2TP protocol for the L2TP tunnel; and

(C) establishing an incoming connection through the shared resource to the client via the L2TP tunnel using a plurality of messages defined by user-defined extensions to the L2TP protocol for the L2TP tunnel.

14. (Original) The method of claim 13 wherein the client resides in a second logical partition that is separate from a first logical partition that includes the shared resource.

15. (Original) The method of claim 13 wherein the client comprises a computer system coupled to the resource server via a network connection.

16. (Original) The method of claim 13 wherein the shared resource comprises a modem.

17. (Original) The method of claim 13 wherein the shared resource comprises a virtual private network (VPN).

18. (Original) The method of claim 13 wherein the incoming and outgoing connections are point-to-point connections.

19. (Original) The method of claim 13 wherein the plurality of messages defined by the user-defined extensions to the L2TP protocol comprise an accept incoming call request message and an accept incoming call reply message.

20. (Currently Amended) A computer-implemented method for sharing a shared resource modem between a resource modem server in a first logical partition that controls the shared resource modem and a client in a second logical partition, the method comprising the steps of:

establishing a layer two tunneling protocol (L2TP) tunnel between the resource modem server and the client by running an L2TP profile on the client and by performing handshaking to establish the L2TP tunnel;

establishing an outgoing connection from the client through the shared resource via the L2TP tunnel using a plurality of messages defined by a predefined L2TP protocol for the L2TP tunnel; and

establishing an incoming connection through the shared resource to the client in the second logical partition via the L2TP tunnel using a plurality of messages defined by user defined extensions to the L2TP protocol for the L2TP tunnel.

the client sending an accept incoming call request (AICRQ) message that is a user-defined extension to an L2TP protocol for the L2TP tunnel;

if the modem is available, the modem server responding to the AICRQ message with an accept incoming call reply (AICRP) message that is a user-defined extension to the L2TP protocol for the L2TP tunnel;

the modem server putting the modem in answer mode;

the modem answering a call and establishing a connection;

the modem server sending an incoming call request (ICRQ) message that is defined in the L2TP protocol to the client to indicate a call has been received;

the client sending an incoming call reply (ICRP) message that is defined in the L2TP protocol to the modem server to acknowledge the incoming call;

the modem server sending an incoming call connect (ICCN) message to the client to connect the call; and

starting virtual point-to-point end-to-end communication between the client and the modem.

21-24. (Cancelled)

25. (Currently Amended) A computer-readable program product comprising:

(A) resource sharing mechanism including:

a first mechanism that establishes a layer two tunneling protocol (L2TP) tunnel between a shared resource server that controls a shared resource and a client;

a second mechanism that establishes an outgoing connection from the client through the shared resource via the L2TP tunnel using a plurality of messages defined by a predefined L2TP protocol for the L2TP tunnel; and

a third mechanism that establishes an incoming connection through the shared resource to the client via the L2TP tunnel using a plurality of messages defined by user-defined extensions to the L2TP protocol for the L2TP tunnel; and

(B) ~~computer-readable signal bearing~~ recordable media bearing the resource sharing mechanism.

26-27 (Cancelled)

28. (Original) The program product of claim 25 wherein the client resides in a second logical partition on the apparatus that is separate from a first logical partition that includes the shared resource.

29. (Original) The program product of claim 25 wherein the client comprises a computer system coupled to an apparatus that includes the resource sharing mechanism via a network connection.

30. (Original) The program product of claim 25 wherein the shared resource comprises a modem.

31. (Original) The program product of claim 25 wherein the shared resource comprises a virtual private network (VPN).

32. (Original) The program product of claim 25 wherein the incoming and outgoing connections are point-to-point connections.

33. (Original) The program product of claim 25 wherein the plurality of messages defined by the user-defined extensions to the L2TP protocol comprise an accept incoming call request message and an accept incoming call reply message.

34. (Currently Amended) A computer-readable program product comprising:

(A) a resource sharing mechanism residing in a first logical partition that shares a modem between a modem server in the first logical partition and a client in a second logical partition by ~~the resource sharing mechanism including:~~

~~a first mechanism that establishes a layer two tunneling protocol (L2TP) tunnel between a shared resource server in the first logical partition that controls a shared resource and a client that resides in a second logical partition;~~

~~a second mechanism that establishes an outgoing connection from the client through the shared resource via the L2TP tunnel using a plurality of messages defined by a predefined L2TP protocol for the L2TP tunnel; and~~

~~a third mechanism that establishes an incoming connection through the shared resource to the client via the L2TP tunnel using a plurality of messages defined by user-defined extensions to the L2TP protocol for the L2TP tunnel;~~

establishing a layer two tunneling protocol (L2TP) tunnel between a modem server in a first logical partition and a client in a second logical partition by running an L2TP profile on the client and by performing handshaking to establish the L2TP tunnel, the client sending an accept incoming call request (AICRQ) message that is a user-defined extension to an L2TP protocol for the L2TP tunnel, and if the modem is available, the



modem server responding to the AICRQ message with an accept incoming call reply (AICRP) message that is a user-defined extension to the L2TP protocol for the L2TP tunnel, the modem server putting the modem in answer mode, the modem answering a call and establishing a connection, the modem server sending an incoming call request (ICRQ) message that is defined in the L2TP protocol to the client to indicate a call has been received, the client sending an incoming call reply (ICRP) message that is defined in the L2TP protocol to the modem server to acknowledge the incoming call, the modem server sending an incoming call connect (ICCN) message to the client to connect the call, and starting virtual point-to-point end-to-end communication between the client and the modem; and

(B) ~~computer-readable signal bearing~~ recordable media bearing the partition-manager resource sharing mechanism.

35-40 (Cancelled)